

# IDAHO TRANSPORTATION DEPARTMENT – DIVISION OF HIGHWAYS STATE OF IDAHO BRIDGE RESEARCH ROADMAP AND PRIORITIES PROJECT REQUEST FOR PROPOSAL

#### GENERAL INFORMATION, SUBMISSION OF PROPOSAL, EVALUATIONS, AND AWARD

## **SECTION 1 - GENERAL INFORMATION**

#### 1.1 Purpose

The Idaho Transportation Department (ITD) Research Program is seeking the services of qualified researchers to develop a research roadmap for addressing research needs in ITD's Bridge Program using a more systematic approach. The final deliverable for this project will be the ITD Bridge Research Roadmap Report, which will be a plan that identifies and prioritizes key research needs for ITD's Bridge Program to guide future research efforts.

# 1.2 Background

The ITD Bridge Section has sponsored research related to bridge materials, design, construction, preservation, and inspection. While this research has generally produced positive results, past research efforts were requested on an ad hoc basis and perhaps do not complement or build on each other. The department is interested in adopting a more proactive and systematic approach to identifying and prioritizing research needs.

#### 1.3 Funding

The use of SPR funds must comply with 23 CFR 420.121(j)

#### **SECTION 2 – SCOPE OF WORK AND DELIVERABLES**

#### 2.1 Goal

The goal of this research is to develop a systematic approach and prioritized roadmap that provides a clear direction of what bridge research topics need to be addressed, consistent with ITD's Mission – *Your Safety, Your Mobility and Your Economic Opportunity*. This will be accomplished through a complete review of ITD's bridge inventory, planned programmatic activities in the Bridge Program, and previous and ongoing research projects.

#### 2.2 Tasks

A list of tasks is detailed below. In addition to the tasks that follow, the researcher and ITD project manager are expected to maintain regular contact as needed. Consistent communication is required to make certain that tasks can be effectively accomplished in accordance with the project timeline, and to ensure that issues or setbacks can be promptly addressed if they arise.

#### Task 1: Project Kick Off Meeting

Host and conduct a meeting at start of project with ITD Project Manager (PM), Technical Advisory Committee (TAC), and Research Program staff to discuss:

- a) Project tasks and deliverables
- b) Project schedules and timelines

- c) Data and information needs
- d) Staff responsibilities and assignments (as applicable)
- e) Proposed schedule for project meetings

Task 2: Develop an Understanding of ITD's Bridge Program Gain a solid understanding of ITD's Bridge Program by:

- a) Compiling and synthesizing information about ITD's bridge inventory, including, but not limited to the number, type, age, and condition of ITD's bridges.
- b) Reviewing information about planned ITD bridge construction, preservation, and maintenance work over the next seven (7) years.
- c) Meeting with program staff to gain an understanding of the future program direction and needs of ITD's Bridge program.
- d) Reviewing information concerning past and current bridge research at ITD.

Task 3: State DOT Bridge Program Best Practices and Literature Review Document current best practices and emerging technologies/practices in the bridge area, particularly focusing on priority issues identified in Task 2. This work would include:

- a) Surveying or interviewing staff at selected state DOTs in neighboring states and states with leading or innovative Bridge Programs to gain an understanding of their program direction and research activities.
- b) Conducting a literature review of bridge research nationally and in other states completed in the past five years as well as active research projects. Where possible, identify implementation efforts and document cost/benefit information for the research.

Task 4: Critical Knowledge and Data Gaps

Identify any critical knowledge and data gaps that need to be addressed through research to enable ITD to implement desirable emerging practices and technologies to strengthen ITD's program.

Task 5: Present the results of the research conducted as part of the project and facilitate a meeting with ITD Bridge Section staff to determine and prioritize Bridge Section research needs.

Task 6: Prepare draft research requests using ITD's Research Project Request Form (Exhibit 1) for five to seven of the priority projects identified to be submitted for consideration by ITD's Research Advisory Council.

# Task 7: Prepare and Present Final Report

The consultant will prepare and present a written final report with input and guidance from the ITD PM. The final report will cover all aspects of the project and will summarize information and data found in reports and products created during the preceding project tasks. The information summarized in the report will be presented to the project team after the consultant has provided an initial draft of the final report, allowing at least two weeks for review of the draft. The final report document will incorporate feedback and address any concerns identified by ITD during initial review of the draft report. The final report must also follow ITD Style Manual for Research Reports and formatting requirements as described in deliverables listed below. The Style Manual and Research Report Template can be downloaded from the ITD Research Program website by selecting the "Resources for Researchers" section from the menu.

#### 2.3 Deliverables

The following deliverables are required for this project:

Deliverable 1: The Contractor must initiate a project kick-off meeting, via video or teleconference, with ITD's PM within ten (10) business days after contract award date and provide meeting minutes within seven (7) days following the kick-off meeting.

Deliverable 2: The Contractor must provide working papers and technical documents documenting the research performed, methods used, and the resulting findings for Tasks 2-6 outlined in Section 2.2 above.

Deliverable 3: The Contractor must host and conduct monthly project status meetings with ITD's PM via video or teleconference. These meetings are designed to cover the progress of all working papers or technical documents being written. Meeting minutes must be taken and supplied to the ITD PM within seven (7) days after the meeting.

Deliverable 4: The Contractor must provide ITD's PM with monthly project summary reports, using the ITD Form 0771: https://apps.itd.idaho.gov/Apps/FormFinder2DMZ/.

Deliverable 5: The Contractor must meet with ITD PM before drafting and presenting the final report, to discuss project findings, conclusions, and recommendations. Meeting minutes must be taken and supplied to the ITD PM within seven (7) days after the meeting.

Deliverable 6: The Contractor must produce draft research requests for five to seven of the priority projects identified to be submitted for consideration by ITD's Research Advisory Council using ITD's Research Project Request Form (Exhibit 1).

Deliverable 7: The Contractor must provide a final report that will serve as the Bridge Section's Research Roadmap for a five (5) to seven (7) year period. The report will document the work performed in the project and present key findings, conclusions, and recommendations. The report will identify of research needs and priorities for ITD sponsored research, requests for NCHRP research, and participation in pooled fund studies. The research roadmap will help develop consensus among ITD staff around research needs, create transparency in the prioritization of the research, provide clarity for researchers who will ultimately be conducting the research, and crucially, will help demonstrate the impact that research has on the work performed by the Bridge Section. It will also be a valuable knowledge management tool for years to come as new staff joins the bridge team and has a comprehensive resource where they can find research goals and accomplishments for the program at the time they start.

Report shall be developed using ITD's Research Report Template and must be consistent with ITD's Research Program Report Process and Style Guide available in the Resources for Research section found at: https://itd.idaho.gov//alt-programs/?target=research-program&target=research-program . The Contractor must host and conduct a presentation, via video or teleconference, with ITD's Project Manager (PM) to discuss the final findings and recommendations.

- a) Draft final report A written report is required for each ITD-supported research project. The draft report must be prepared using ITD's Research Report template. The style guide and template are available in the "Resources for Researchers" section of the Research program website.
- b) Final report The final report should be professionally done and comparable in quality to a published journal article or dissertation. The report must be written to be understandable to both the technical staff involved in the project (e.g., engineers, planners) and other likely readers (e.g., department management, board members, legislators).

# **SECTION 3 – SUBMISSION RESPONSE**

#### 3.1 Submission Contact

Proposals must be submitted electronically to the following:

Name: Ned Parrish, Research Program Manager

Email: research@itd.idaho.gov

#### 3.2 Submission Response Deadline

Contractor response must be submitted no later than **January 24, 2023 by 5:00 PM (MDT).** Submissions must be submitted to the Submission Contact listed above in order for your submission to be evaluated.

#### 3.3 Inquiries

Questions regarding this request must be submitted to the Submission Contact listed above. Questions must be submitted no later than **December 23, 2022 by 5:00 PM (MDT)**.

Responses to all questions will be compiled into one (1) list once the questions submission date has expired. Questions and responses will be posted on the Research Program webpage along with other solicitation information within ten business days of the deadline for submitting questions.

# **3.4 Response Content**

Response must be submitted as a PDF, not to exceed ten (10) pages (excluding resumes for proposed team members) and must be organized to include the following:

- 1 Cover Page must Include the following information:
  - a) Project Title (Bridge Research Roadmap and Priorities)
  - b) "Submitted by" section including name, institution, address, phone, fax #, and e-mail address
  - c) "Submitted to" section indicating the proposal is being submitted to the Idaho Transportation Department, Research Program
  - d) Proposal Date
- 2 Business Information Provide a profile of your business, university department or research center, including business history, description of current service area, and customer base. Provide current contact information for a minimum of three (3) references from customers who have received the same or similar service for previous projects relating to similar work.
- 3 Problem Statement Concisely express your understanding of the problem(s) presented in this solicitation. Do not just restate language in the research request, but instead articulate your own understanding of, and insight into, the problem(s).
- 4 Research Approach/Work Plan Describe the work that will be performed to complete the tasks and deliverables. Include each of the tasks listed in **Section 2 Scope of Work and Deliverables** and describe in detail how each task will be performed. Identify any additional tasks you feel are needed and explain any deviations from the tasks required by ITD. Identify any obstacles you see to achieving the objectives and how you would propose overcoming them.
  - The research plan should be complete and logically organized. It should clearly articulate the researcher's approach to the problem and how the work done will contribute to accomplishment of the project tasks and deliverables. The response should include discussion of applicable principles and theories, the type and range of data needed, the data analysis methods to be employed, and how possible recommendations will be identified and developed.
- 5 Research History Explain types of research performed, and provide samples if allowed and not confidential, with same or similar to the scope of this project. This may include previous publications as attachments or links to web-hosted documents.
- 6 Project Management and Communications Approach Describe project management strategy including steps that will be used to 1) monitor project schedule and budget, and 2) ensure that regular communication occurs with ITD's PM throughout the project. Include your company's escalation process, with points of contact, in the event ITD will need to escalate concerns during the contract.
- 7 Schedule Identify the estimated start and completion dates for the project, as well as the completion dates for each task and deliverable. Each proposal should include a Gantt chart depicting the schedule for completing each task and deliverable. The schedule must indicate the number of months allocated to each task and deliverable.

Be sure to build sufficient time into your time schedule to complete the work outlined in your proposal. It is very important to ITD's Research Program that projects be completed on time. As a result, the project must be complete within twelve (12) months from the award date of the contract; this includes the kick-off meeting.

Example of a schedule below:

Task		Month												
		2	3	4	5	6	7	8	9	10	11	12		
1 Literature Review														
2 Field Survey														
3 Lab Study														
4 Develop Database														
5 Develop Recommendations														
6 Prepare Draft Final Report														
7 Peer Review of Draft Report														
8 Editorial Review of Draft Report														
9 Make Peer Review/Editorial Changes and Submit to ITD														
10 ITD Initial Review of Report Draft														
11 Revise Draft and Resubmit for Final Review														
12 Make Any Final Changes and Submit Final Report														

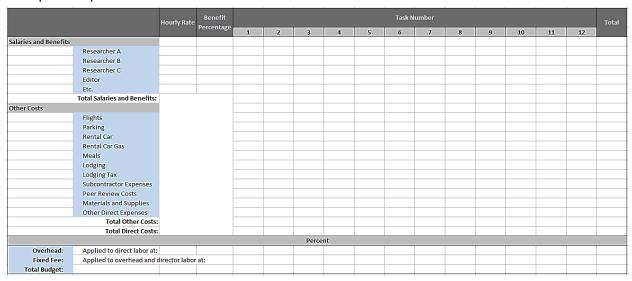
- 8 Staffing Include the following information:
  - a) Identify all members of the proposed research team and describe their role in the project.
  - b) Explain how team members' past academic, professional, and research experience relate to the work they will perform.
  - c) Provide information about other commitments the principal investigator(s) and research team will have during the project. This information must be sufficiently detailed to allow assessment of the researchers' experience, projects completed, and ability to complete the work within the required time schedule.
  - d) Identify the individuals who will perform quality control work on the project, including:
    - i. An independent peer reviewer with sufficient expertise to assess the adequacy of the work performed and the conclusions reached by the project team, and
    - ii. A report editor responsible for ensuring project reports are clearly and concisely written and are prepared in accordance with ITD Research Program guidelines.
  - e) Provide a detailed breakdown of each team member's involvement in each task and deliverable.

Example of a detailed breakdown below:

Name Of Person	Role in Study	Ho	urly Rate							Task (Hours)								
				1	2	3	4	5	6	7	8	9	10	11	12	Total		
Researcher A	Principal Investigator	\$	75.00	10	40		40	40	40			20	20	10	10	230		
Researcher B	Co-Principal Investigator	\$	60.00	10		40	40	40	40			20	20	10	10	230		
Subcontractor A	Statistical Analysis	\$	35.00	25	200		100	40	100			40	20	10	10	545		
Subcontractor B	Role description	\$	50.00	25		200	100	40	100			40	20	10	10	545		
Peer Reviewer	Technical Review	\$	50.00							40						40		
Report Editor	Report Editing	\$	25.00								40					40		
Etc.	Role description	\$	25.00	10					10						10	30		
	_	To	tal Hours	80	240	240	280	160	290	40	40	120	80	40	50	1660		

- 9 Required ITD Involvement Describe any assistance required from ITD, such as:
  - a) Data collection
  - b) Access to ITD records or databases
- 10 Budget Provide a quote of the costs for the work outlined in your proposal using the format provided in the table below. The total cost for the project must not exceed \$100,000. This range is ITD's estimate of the level of funding necessary to complete the work. Contractor should set the scope and depth of the study accordingly.

#### Example of a quote:



#### **SECTION 4 – PROPOSAL REVIEW AND SELECTION**

#### 4.1 Response Evaluation

Proposals will be evaluated by ITD technical review team comprising staff knowledgeable in the background and content of the project topic. Selection will be made in consideration of general criteria based on the vendor's response to the Scope of Work and as follows:

- a) The expertise, and technical capabilities of team members to perform the proposed work, resources including any specialized services available to perform the work within the specified project timeline, and record of past performance, including references, quality of work, and contract administration
- b) The research approach and methodology detailed in the proposal to meet the project tasks and deliverables
- c) Proposed project management and communications approach
- d) Thorough budget and cost estimate that is within project budget constraint

Evaluation criteria will be weighted as shown below:

Evaluation Criteria	Weight
Experience and Qualifications	35%
Proposed Research Approach	35%
Project Management and Communications Strategy	10%
Budget and Cost Estimate	20%
Total	100%

The scores from the technical evaluation will be summed and the proposals will be ranked according to their total scores. Technical reviewers are required to refrain from discussing proposals with other review team members prior to determination of final score. The contract will be awarded to the responsive and responsible proposer with the highest score.

Proposal review is expected to take approximately two weeks following the date of the submission deadline. The technical review team expects that proposers will be notified of selection for this project no later than **February 14, 2023.** 

ITD reserves the right to reject any and all proposals submitted. It may negotiate with the proposer to address specific weaknesses in the proposal submitted.

#### SECTION 5 – AWARD

## **5.1 ITD Contract Award Agreements**

The result of this request will be awarded as a Professional Service Agreement (PSA) if a private consultant is selected or as a Memorandum of Agreement (MOA) if the contract is awarded to a public university.

#### 5.2 Term

The resulting Contract shall commence on the date of the final signature provided by the Submission Contact listed above. The anticipated term of this contract will be for **twelve (12) months** unless extended by mutual agreement between the parties or terminated earlier, in writing, in accordance with the PSA or MOA.

#### **SECTION 6 – TERMS AND CONDITIONS**

#### 6.1 State of Idaho Standard Contract Terms and Conditions

For terms and conditions including insurance requirements, please see <u>State of Idaho Standard Contract</u> <u>Terms and Conditions</u>. Any requested modifications to the Standard Contract Terms and Conditions should be identified in the proposal.

#### 6.2 Insurance

Within 5 days of notification of award (or such other time as designated by the Purchasing Activity), the apparent successful Bidder or Offeror will provide certificates of insurance required herein and will maintain the insurance during the life of the Contract. There are no provisions for exceptions to this requirement. Failure to provide the certificates of insurance within the five (5) business day period may be cause for your Bid or Proposal to be declared non-responsive or for your Contract to be cancelled. (Attachment 1 – Insurance Requirements)

#### **6.3 Administrative Fees**

Administrative fee detailed in <u>State of Idaho Standard Contract Terms and Conditions</u> does not apply under the resulting contract agreement.

#### **Attachment 1 – Insurance Requirements**

Within 5 days of notification of award (or such other time as designated by the Purchasing Activity), the apparent successful Bidder or Offeror will provide certificates of insurance required herein and will maintain the insurance during the life of the Contract. There are no provisions for exceptions to this requirement. Failure to provide the certificates of insurance within the 5 business day period may be cause for your Bid or Proposal to be declared non-responsive or for your Contract to be cancelled.

Contractor shall carry liability and property damage insurance that will protect it and the State of Idaho from claims for damages for bodily injury, including accidental death, as well as for claims for property damages, which may arise from operations under the Contract whether such operations be by themselves or by anyone directly or indirectly employed by either of them

Contractor shall not commence work under the Contract until it obtains all insurance required under this provision and furnishes a certificate or other form showing proof of current coverage to the State. All insurance policies and certificates must be signed copies. After work commences, the Contractor will keep in force all required insurance until the Contract is terminated.

- Commercial General and Umbrella Liability Insurance. Contractor shall maintain Commercial General Liability (CGL) and, if necessary, Commercial Umbrella insurance with a limit of not less than \$1,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to the Contract.
- 2. CGL insurance shall be written on ISO occurrence form CG 00 01 (or a substitute form providing equivalent coverage) and shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).
- 3. Commercial Automobile and Commercial Umbrella Liability Insurance. Contractor shall maintain Commercial Automobile Liability and, if necessary, Commercial Umbrella Liability insurance with a limit of not less than \$1,000,000 each accident. Such insurance shall cover liability arising out of any auto (including owned, hired, and non-owned autos).
- 4. Bidder or Offeror may request a waiver from providing Commercial Automobile and Commercial Umbrella Liability Insurance in its Bid or Proposal if the Bidder or Offeror will not use any owned, hired or non-owned vehicles to conduct business under the Contract, if it is awarded the Contract, and the State of Idaho will consider the request. If the Bidder or Offeror submits a request to waive the provision of Commercial Automobile and Commercial Umbrella Liability Insurance after the due date and time for receipt of Bids or Proposals, the State of Idaho may not consider the request.
- 5. Workers Compensation Insurance and Employer's Liability. Contractor shall maintain workers compensation and employer's liability. The employer's liability shall have limits not less than \$500,000 each accident for bodily insurance by accident or \$500,000 each employee for bodily injury by disease.
- 6. Contractor must provide either a certificate of workers compensation insurance issued by a surety licensed to write workers compensation insurance in the State of Idaho, as evidence that the Contractor has in effect a current Idaho workers compensation insurance policy, or an extraterritorial certificate approved by the Idaho Industrial Commission from a state that has a current reciprocity agreement with the Idaho Industrial Commission.
- 7. State of Idaho as Additional Insured: The liability insurance coverage required for performance of the Contract shall include the State of Idaho, the (agency) and its divisions, officers and employees as additional insured, but only with respect to the Contractor's activities to be performed under the Contract.

- 8. The Contractor must provide proof of the State of Idaho, the (agency) and its divisions, officers and employees being additional insured by providing endorsements to the liability insurance policies showing the State of Idaho, the (agency) and its divisions, officers and employees as additional insured. The endorsements must also show the policy numbers and the policy effective dates.
- 9. If a liability insurance policy provides for automatically endorsing additional insured when required by contract, then, in that case, the Contractor must provide proof of the State of Idaho, the (agency) and its divisions, officers and employees being additional insured by providing copies of the policy pages that clearly identify the blanket endorsement.
- 10. Notice of Cancellation or Change: Contractor shall ensure that should any of the above described policies be cancelled before the expiration date thereof, or if there is a material change, potential exhaustion of aggregate limits or intent not to renew insurance coverage(s), that written notice will be delivered to the Division of Purchasing (if the Contract was issued by the Division) or to the Purchasing Activity (contracting state agency) in accordance with the policy provisions.
- 11. Contractor shall further ensure that all policies of insurance are endorsed to read that any failure to comply with the reporting provisions of this insurance, except for the potential exhaustion of aggregate limits, shall not affect the coverage(s) provided to the State of Idaho, and its divisions, officers and employees.
- 12. Acceptable Insurers and Deductibles: Insurance coverage required under the Contract shall be obtained from insurers rated A-VII or better in the latest Bests Rating Guide and in good standing and authorized to transact business in Idaho. The Contractor shall be financially responsible for all deductibles, self-insured retention's and/or self-insurance included hereunder. The coverage provided by such policy will be primary to any coverage of the State on or related to the Contract and shall provide that the insurance afforded applies separately to each insured against whom a claim is made, except with respect to the limitation of liability.
- 13. Waiver of Subrogation: All policies shall contain waivers of subrogation. The Contractor waives all rights against the State and its officers, employees, and agents for recovery of damages to the extent these damages are covered by the required policies. Policies may contain deductibles but such deductibles will not be deducted from any damages due to the State.

# Exhibit 1 ITD's Research Project Request Form

# ITD RESEARCH PROGRAM

# PROJECT REQUEST FORM

#### 1. TITLE:

#### 2. SUBJECT AREA:

(e.g., Pavements, Bridges, Environment, Maintenance, Safety, Planning, Management, etc.)

#### 3. PROBLEM STATEMENT:

What problem would be addressed by this project?

How is ITD impacted by the problem?

#### 4. RESEARCH PROPOSED:

What are the objectives of the proposed project?

Is the proposed work an extension of past research efforts?

What tasks do you envision?

What deliverables/outputs will be produced?

How will the research results be implemented?

# 5. ANTICIPATED BENEFITS/OUTCOMES:

How will the information and deliverables generated from the project be used to solve the problem?

How will the proposed research further the accomplishment of ITD's long-range goals and or support the department's key management principles?

What practical benefits will result from the work proposed, and how can they be measured? (cost savings, process efficiencies, accidents reduced, lives saved, etc. – please be specific)

#### 6. RESEARCHER/CONSULTANT RECOMMENDATIONS:

Note - Research may be conducted by universities or private research firms. New legislation (section 67-2332A, Chapter 23, Title 67 of Idaho Statute) requires that contracts with Idaho universities be competitively solicited.

Is the project appropriate for university researchers or is a private firm needed?

If appropriate for university researchers, co an outside university preferred?	an the research be conducted by any of Idaho's universities, or is
If a private form is needed, can the project	be bid competitively?
If you have a particular researcher/consult you feel they are most appropriate for this	rant in mind for the project, who do you recommend and why do work?
	nted with an Idaho university, is the researcher uniquely qualified ble source, or such that an exemption from competitive bidding is
7. ESTIMATE RESEARCH PERIOD AND FUNDING NE Estimated Length of Project:  Estimated Cost for the Project: \$	EDED: months
project through implementation. The sponsor will c	ponsor —section manager or above — who will champion the designate a project manager to provide day-to-day technical work, review all project deliverables, and takes the lead in hen the research is completed.)
Name:	Title:
Signature:	
technical advisory committee (TAC), schedules perio	echnical oversight of the project. The project manager chairs the odic meetings between the researchers and the TAC, reviews and nical review of all deliverables by the TAC, and coordinates
Name:	
E-mail:	Phone #:
ITD STAFF DEVELOPING THIS REQUEST: Name:	Title:
E-mail:	Phone #:
Submit completed request form to:	

**Ned Parrish** Research Program Manager Ned.Parrish@itd.idaho.gov 208-334-8296